

APPLICATION
FOR
UNITED STATES LETTERS PATENT

PATENT APPLICATION

SPECIFICATION

TO ALL WHOM IT MAY CONCERN:

Be it known that Christopher R. Harlocker of 237 Noble Avenue, Lake Forest, IL 60045 has invented certain improvements in CARRYING CASE PROVIDING PRIVACY AND LIGHT SHADE FOR A SCREEN OF A LAPTOP COMPUTER, of which the following description is a specification.

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CARRYING CASE PROVIDING PRIVACY AND LIGHT SHADE

FOR A SCREEN OF A LAPTOP COMPUTER

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to carrying cases for laptop computers and is directed more particularly to such a case having facility for providing privacy and light shade for the screen of the computer during use of the computer in the carrying case.

2. Description of the Prior Art

It is customary for many travelers, particularly business travelers, to carry a laptop computer and to use the computer in the course of traveling by air, train, automobile or bus and while waiting to board the vehicle of choice. It often happens that travelers find themselves in close quarters with other travelers and do not wish to have onlookers reading their computer screen. Further, travelers often have no control over nearby windows and electric lights and suffer from glare on the computer screen.

Thus, there is a need for a privacy and light shade which would allow the traveler to use a laptop computer with sunshine or other light blocked from impinging on the computer screen, and with the screen removed from the sight of casual onlookers.

There is further a need for the aforementioned privacy and light shade which does not constitute a separate "carry on"

1 article, but rather is integral with the carrying case in which
2 the computer resides.

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4 SUMMARY OF THE INVENTION

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6 An object of the invention is, therefore, to provide a
7 carrying case for a laptop computer, the case having integral
8 therewith a privacy and light shade readily and easily movable
9 between a stowed position within the carrying case to a position
10 extended from the case and providing a shroud around the computer
11 screen for purposes of privacy and protection against glare.

12 With the above and other objects in view, a feature of the
13 invention is the provision of a carrying case providing privacy
14 and light shade for a screen of a laptop computer disposed
15 therein. The carrying case includes top and bottom portions
16 movable between closed and open positions, and panels disposed
17 flush on the interior surface of the case top portion and
18 pivotally movable from the top portion to form an inverted u-
19 shaped shroud resting on the interior surface of the case bottom
20 portion. The case top and bottom portions and the panels form a
21 five sided cavity, a sixth side being open to permit viewing of
22 the screen of the computer by the operator.

23 In accordance with a further feature of the invention, there
24 is provided a carrying case providing privacy and light shade for
25 a screen of a laptop computer. The carrying case includes a case
26 bottom and a case top hingedly connected to each other along back
27 portions thereof and movable between open and closed positions.

1 Connection structure is disposed along front and side portions of
2 " the case for locking the front and side portions of the case top
3 to front and side portions of the case bottom when the case is
4 closed, the connection structure being releasable to permit the
5 case top to move away from the case bottom to a location
6 generally normal to the case bottom. A central panel is
7 pivotally attached along a top edge of an inside surface of the
8 case top, the central panel being adapted to lie flush with the
9 inside surface of the case top. First and second side panels are
10 pivotally connected to the central panel, such that the side
11 panels are adapted to lie flush with the central panel and
12 adapted to be moved pivotally away from the central panel to
13 positions generally normal to the central panel. Upon opening
14 the case and moving the case top to the position generally normal
15 to the case bottom, the central panel and the first and second
16 side panels are pivotally movable inwardly from the case top to
17 position the central panel substantially parallel with the case
18 bottom. The first and second side panels are then movable
19 downwardly and outwardly with free ends of the side panels being
20 engageable with an inner surface of the case bottom, with the
21 side in the positions generally normal to the central panel and
22 generally normal to the case bottom. The case bottom, case top,
23 central panel, and side panels thereby form a five sided cavity,
24 a sixth side being open for viewing of the computer screen
25 disposed within the cavity.

26 In accordance with a further feature of the invention, there
27 is provided in combination, a laptop computer and a carrying case

1 therefor. The combination includes a laptop computer which, in
2 turn, includes a keyboard portion and a viewing screen portion,
3 the keyboard portion and the viewing screen portion being
4 hingedly connected at rear edges thereof, with that the viewing
5 screen portion is movable to a position generally normal to the
6 keyboard portion. The combination further includes a carrying
7 case retaining the computer, the carrying case including top and
8 bottom portions movable between closed and open positions, and
9 panels adapted to be disposed flush on an interior surface of the
10 top portion and pivotally movable from the top portion to form an
11 inverted u-shaped shroud resting on an interior surface of the
12 bottom portion. The top and bottom portions and the panels are
13 adapted to thereby form a five-sided cavity. The computer screen
14 portion is movable in the cavity from a closed position to the
15 position generally normal to the keyboard portion and proximate
16 the case top portion. The shroud is open on a sixth side to
17 permit viewing of the computer screen portion by an operator,
18 while the shroud provides privacy and light shade.

19 In accordance with a still further feature of the invention,
20 there is provided in a method for operating a laptop computer
21 with the screen thereof shielded for privacy and prevention of
22 glare. The method includes the steps of providing in
23 combination, a laptop computer and a carrying case therefor. The
24 combination includes a laptop computer having a keyboard portion
25 and a viewing screen portion. The keyboard portion and the
26 viewing screen portion are hingedly connected at rear edges
27 thereof, such that the viewing screen portion is movable to a

1 position generally normal to the keyboard portion. The
2 combination further includes a carrying case retaining the
3 computer, the carrying case housing top and bottom portions
4 movable between closed and open positions, and panels adapted to
5 be disposed flush on an interior surface of the top portion and
6 pivotally movable from the top portion to form an inverted u-
7 shaped shroud resting on an interior surface of the bottom
8 portion, the top and bottom portions and the panels being adapted
9 to thereby form a five-sided cavity. The method further includes
10 the steps of opening the case and moving the top portion thereof
11 to a position upstanding from the bottom portion, moving the
12 panels from the position flush with the interior surface of the
13 top portion to positions wherein a central panel extends
14 substantial parallel with the bottom portion, and side panels at
15 either end of the central panel to positions generally normal to
16 the bottom portion, whereby to form a shroud closed on five sides
17 of the computer, and moving the computer screen portion away from
18 the computer keyboard portion and toward the case top portion,
19 the shroud being open on a sixth side to permit viewing of the
20 computer screen portion by an operator, while the shroud provides
21 privacy and protection from glare.

22 The above and other features of the invention, including
23 various novel details of construction and combinations of parts,
24 will now be more particularly described with reference to the
25 accompanying drawings and pointed out in the claims. It will be
26 understood that the particular device, combination, and method
27 embodying the invention are shown by way of illustration only and

1 not as limitations of the invention. The principles and features
2 of this invention may be employed in various and numerous
3 embodiments without departing from the scope of the invention.

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BRIEF DESCRIPTION OF THE DRAWINGS

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Reference is made to the accompanying drawings in which is
8 shown an illustrative embodiment of the invention, from which its
9 novel features and advantages will be apparent.

10 In the drawings:

11 FIG. 1 is a perspective view of a carrying case for a laptop
12 computer, the case being shown in a closed condition;

13 FIGS. 2-4 are perspective views of the case of FIG 1,
14 showing sequential steps in opening the case and setting up the
15 privacy and light shade structure, and illustrations of an
16 embodiment of the invention; and

17 FIG 5. is a perspective view of the carrying case of FIG. 4
18 shown in combination with a laptop computer disposed therein.

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DESCRIPTION OF THE PREFERRED EMBODIMENT

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22 Referring to FIG. 1, it will be seen than an illustrative
23 carrying case 20 includes a bottom portion 22 and a top portion
24 24 hingedly connected together along back portions 26, 28
25 thereof. The bottom portion 22 is provided with an upstanding
26 lip 30 at a front portion 32 and end portions 34, 36 thereof.
27 Similarly, the top portion 24 is provided with a lip 40 at a

1 front portion 42 and end portions 44, 46 thereof. The lips 30,
2 40 are each provided with a readily releasable connection
3 structure 48, such as a zipper or loop locks (not shown) for
4 locking the bottom portion 22 and top portion 24 together for
5 carrying an enclosed laptop computer 50, and for unlocking the
6 top portion 24 from the bottom portion 22 to permit opening of
7 the case 20 in order to use the computer 50.

8 The computer 50 is nestled in the bottom portion 22 of the
9 carrying case 20, surrounded by the lips 30, 40 and the back
10 portions 26, 28 and, when the case is closed, sandwiched between
11 the case top and bottom portions 24, 22.

12 The computer 50 includes a keyboard portion 52 and a screen
13 portion 54 which are hingedly connected along back edges 56
14 thereof, such that the screen portion can be pivotally moved to a
15 position upstanding from the keyboard portion 52, in known
16 fashion.

17 A panel assembly 60 is adapted to lie flush with the case
18 top portion 24. The panel assembly 60 includes a central panel
19 64 and two side panels 66, 68 hingedly connected, as by living
20 hinges 70, to opposite sides of the central panel 64.

21 In operation, the connection structure 48 is manipulated to
22 unlock the case top portion 24 from the case bottom portion 22.
23 The top portion 24 is pivoted upwardly about the back portion 28,
24 until the top portion 24 is upstanding from the bottom portion
25 22, at a position generally normal to the bottom portion.

26 A first edge 72 of the panel assembly 60 is then lifted from
27 the case top portion. The first edge 72 of the panel assembly is

1 raised by pivotal movement about an opposite edge to a position
2 "generally parallel to the bottom portion 22. The two side panels
3 66, 68 thereupon fall downwardly, the free ends 76, 78 thereof
4 engaging the bottom portion 22 and upstanding therefrom generally
5 normal to the bottom portion.

6 The bottom portion 22 is provided with bottom fasteners 80,
7 82 each near an end lip 34, 36 of the bottom portion. The side
8 panels 66, 68 are each provided with an end fastener 84, 86
9 proximate the free ends 76, 78 thereof. The bottom fasteners 80
10 and 82 are engageable, respectively, with the free end fasteners
11 84, 86 to lock the side panel free ends 76, 78 to the case bottom
12 portion 22.

13 Similarly, the side panel back edges 94, 96 are provided with
14 fasteners 100, 102 respectively engageable with fasteners 104,
15 106 on the case top portion 24 to secure the side panel back
16 edges 94, 96 to the case top portion. Preferably, the fasteners
17 100, 102, 104 and 106 are strips of hermaphroditic material (such
18 as Velcro®), but may alternatively be snap fasteners or other
19 types, as desired.

20 In further operation, after the shroud is established as
21 described above, the fasteners 80 and 84 are connected together,
22 the fasteners 82 and 86 are connected together, as are the
23 fasteners 100 and 104, and the fasteners 102 and 106.

24 The panel assembly 60 thus forms an inverted u-shaped shroud
25 which in conjunction with the case bottom and top portions 22,
26 24, provides a five sided cavity, open on the sixth side for
27 viewing the screen portion 54 of the computer.

1 Once the cavity is established, the computer screen portion
2 54 is raised from overlying the computer keyboard portion 52 to
3 an upright position, upstanding from the keyboard portion and
4 proximate and generally parallel to top portion 24.

5 The case top and bottom portions preferably are of internal
6 construction making the top and bottom portions stiff, though the
7 external material is preferably of a padded material, or leather,
8 or otherwise soft material. The panels 64, 66, 68 are also
9 preferably of a stiff internal construction with the exterior
10 thereof, particularly the surface internal to the cavity formed
11 thereby, of a non glare, non reflective matt material, preferably
12 of a black or other dark color.

13 The carrying case 20 is provided with a loop handle 108,
14 preferably including a loop 108a, 108b on each of the case bottom
15 and top portions 22, 24.

16 There is thus provided a carrying case for a laptop
17 computer, the case having integral therewith a privacy and light
18 shade easily movable between a position stowed within the case
19 and a position extended from the case and providing a shroud
20 around the computer screen for privacy and light shade.

21 It will be understood that many additional changes in the
22 details, materials, steps, and arrangements of parts, which have
23 been herein described and illustrated in order to explain the
24 nature of the invention, may be made by those skilled in the art
25 within the principles and scope of the invention or expressed in
26 the appended claims.